



State of California -The Natural Resources Agency  
DEPARTMENT OF FISH AND GAME  
South Coast Region  
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EDMUND G. BROWN JR., Governor  
CHARLTON H. BONHAM, Director



December 29, 2011

Mr. Matthew Schneider  
County of San Diego  
Department of Planning and Land Use  
5201 Ruffin Road, Suite B  
San Diego, California 92123

**Subject: Wind Energy Zoning Ordinance and General Plan Amendment (POD10-007, LOG NO 09-00-003) San Diego County (SCH# 2010091030)**

Dear Mr. Schneider:

The Department of Fish and Game (Department) has reviewed the Draft Environmental Impact Report (DEIR) for amendments to the County of San Diego (County) Wind Energy Zoning Ordinance (Ordinance) and General Plan Amendments (Project) dated November 8, 2011. The DEIR was prepared by the County acting as the Lead Agency. On December 21, we requested an extension to the comment period from Mr. Matthew Schneider and he agreed to extend the comment due date from December 23 to December 30. We appreciate the extension. The comments provided herein are based on the information provided in the DEIR, our knowledge of sensitive species and declining vegetative communities, and our participation in regional conservation efforts.

DD-1

**Project Description:** The proposed Project consists of clarifications, deletions and revisions to provide an updated set of definitions, procedures and standards to the Ordinance. The amendments will facilitate a Ministerial review and permit process for small wind turbines and meteorological testing (MET) facilities that meet zoning verification. The proposed amendments to the Ordinance set limits on small wind turbine maximum height to 80 feet and maximum total generation of 50 kilowatts (kW) with a maximum of three pole-mounted turbines or maximum of five roof-mounted turbines per legal lot. Small wind turbines could be constructed as an "accessory use" in residential, commercial, industrial, agricultural, and specific plan zones. Small turbine or MET facility projects that do not meet the zoning criteria would continue to require discretionary review, pursuant to the California Environmental Quality Act (CEQA), through an Administrative permit process and would be required to implement measures to avoid or minimize and fully mitigate the impacts of "take" of species listed under the California Endangered Species Act (CESA) as necessary.

DD-2

DD-3

The Project also updates the Ordinance criteria for property line setbacks for large wind turbine projects. Large wind turbines are those greater than 50 kW and require Major Use Permits (MUP). The Project would reduce the setback requirement from property lines for large turbines from the current minimum of 4 times to equal to 1.1 times the wind turbine height. Property line setbacks also include noise level restrictions. Noise levels, based on a C-Weighted Sound Limit for operating turbines shall not exceed the long-term background sound level by more than 20 decibels as both background and turbine noise are measured at each property line of the lot on which a large turbine is located. A noise waiver would allow an increase in the C-weighted sound limit if the facility provided special economic, social, or technological benefits.

DD-4

*Conserving California's Wildlife Since 1870*

# Draft Responses to Comments

Mr. Matthew Schneider  
December 29, 2011  
Page 2 of 7

The specific sections amended in the Ordinance include sections 1110, 6123, 6156.z, 6158.b, 6950, 6951, and 6952; and Section 6359 would be changed to Section 7359. The proposed Ordinance would apply to the unincorporated portions of the County of San Diego.

DD-5

**Previous Comments:** The Department provided comments on March 26, 2010 to Ordinance Amendment (POD 09-006, LOG NO. 09-00-003) (SCH# 2010021070) and on October 13, 2010 to Ordinance Amendment (POD 09-006, LOG NO. 09-00-003) (SCH# 2010091030). The Department appreciates the County's consideration of our comments, and incorporation of many of them into the Ordinance. The Department remains concerned about our previous comments that were not incorporated. Those concerns are reiterated in the appropriate sections below.

DD-6

**Department Jurisdiction:** The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the Project (CEQA Guidelines Section 15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines Section 15381 over those aspects of the proposed Project that come under the purview of CESA (Fish and Game Code Section 2050 *et seq.*) and Fish and Game Code Section 1600 *et seq.* The Department also administers the Natural Community Conservation Planning Act (NCCPA). The County is implementing its approved Multiple Species Conservation Program (MSCP) Subarea Plan, which was prepared pursuant to NCCPA. The County is also working towards an approved North County MSCP and has conducted preliminary habitat evaluation and draft reserve design review for the draft East County MSCP Plan.

**Fully Protected Species:** Six fully protected bird species that are particularly susceptible to impacts from wind turbines are known to occur within the County, including: the American peregrine falcon (*Falco peregrinus anatum*), brown pelican (*Pelecanus occidentalis*), California least tern (*Sterna albifrons browni*), golden eagle (*Haliaeetus leucocephalus*), California condor (*Gymnogyps californianus*) and white-tailed kite (*Elanus leucurus*). The fully protected mammal species that could be impacted by the Project are bighorn sheep (*Ovis canadensis*) and ring-tailed cat (*Bassariscus astutus*). The Department has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Except as provided in the Fish and Game Code (e.g. for necessary scientific research), take of any fully protected species is prohibited, and cannot be authorized by the Department.

DD-7

**CESA-Listed Protected and Other Rare Species:** The potential exists for wind projects, regardless of size, to reduce populations or restrict the range of the following endangered, rare, or threatened species (as defined in Section 15380 of CEQA), which are present within the region: the CESA-listed endangered least Bell's vireo (*Vireo bellii pusillus*) the CESA-listed threatened Swainson's hawk (*Buteo swainsoni*), and southwestern willow flycatcher subspecies (*Empidonax traillii extimus*); and the California State Species of Special Concern (SSC) burrowing owl *Athene cunicularia*, tricolored blackbird (*Agelaius tricolor*), northern harrier (*Circus cyaneus*), loggerhead shrike (*Lanius ludovicianus*), California horned lark (*Eremophila alpestris actia*), Le Conte's thrasher (*Toxostoma lecontei*), coastal California gnatcatcher (*Polioptila californica californica*), pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillii*), western mastiff bat (*Eumops perotis californicus*), American badger (*Taxidea taxus*) and flat-tailed horned lizard (*Phrynosoma mcallii*). Additional endangered, rare, or threatened species may also be present in the region that the project may impact.

# Draft Responses to Comments

Mr. Matthew Schneider  
December 29, 2011  
Page 3 of 7

**General Avian Protection:** The Department has jurisdiction over actions that may result in the disturbance or destruction of nests, or the unauthorized take of CESA-listed avian species. The pertinent sections of the Fish and Game Code that protect avian species, their eggs, and nests include 3503 (regarding unlawful take, possession, or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame birds). Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act of 1918 (50 C.F.R. § 10.13) and Fish and Game Code Section 3513.

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### Department Comments

The Department is concerned that baseline assessments and evaluations of potential impacts to biological resources are not included in the Ministerial or Administrative permit review process for small wind turbine projects. We are also concerned that specific standards, including those for avoiding and minimization impacts (such as setbacks) to protect natural resources from ground disturbance and operations of small wind turbine and MET towers have not been fully developed in the Ordinance. We also have concerns that the proposed noise level setback amendment regarding large wind turbines may provide a decreased level of protection to biological resources in certain circumstances compared to the current standard minimum setback. The Department offers the following comments and recommendations to assist the County in assuring potential wind energy project impacts on biological resources are avoided or minimized.

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The proposed Project would allow small wind turbines or MET facilities with a Ministerial review if they meet the requirements of the zoning verification in the amended ordinance. The Lead Agency states that small wind turbine projects that fit the zoning verification would have relatively small blades and are at a height not expected to have a high frequency of bat or bird collisions. A review of manufacture's specifications for wind turbines that fit the proposed Ordinance zoning verification showed a 20-kW horizontal axis wind turbine would have a rotor blade diameter of 35 feet and a similar 5-kW turbine would have a rotor blade diameter of more than 15 feet. Furthermore a 50-kW turbine which meets the maximum generating capacity for small turbines in the ordinance and qualifies for an Administrative Permit may have a rotor blade diameter of approximately 60 feet (<http://www.windpowercn.com>). Given the rotor diameters that meet the Ordinance standard based on tower height, one poorly placed small wind turbine has the potential to kill a significant number of birds and bats, including fully protected and sensitive birds for as long as the turbines are in operation (Kerlinger et al. 2008, Kuvlesky et al. 2007 and Smallwood and Thelander 2004). Based on the results reported in these cited documents and our knowledge of wind turbine impacts, the Department agrees with statements in the DEIR that development of small wind turbines pursuant to the proposed Ordinance would have direct and cumulative significant impacts to avian and bat species, sensitive mammals and terrestrial habitats. However, the Department does not concur with the Lead Agency's findings that these impacts are unavoidable. There are feasible standards and measures to avoid or minimize impacts to biological resources from wind energy activities that could be but are not incorporated into the Ordinance.

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**Wind Turbine Setback Standards:** Turbine location may be the most critical decision during small wind facility development to minimize or avoid impacts to birds and bats. Studies show that turbine location, density and flight behavior of birds near the turbine location are important factors related to the frequency of bird collisions with wind turbines (Kuvlesky et al. 2007, Smallwood and Thelander 2004). Site selection in and of itself that avoids areas of high bird density or high bird use areas could significantly reduce the potential for avian collisions with tower-mounted turbines. High bird density areas are wetlands and waterways including riparian

DD-15

Mr. Matthew Schneider  
December 29, 2011  
Page 4 of 7

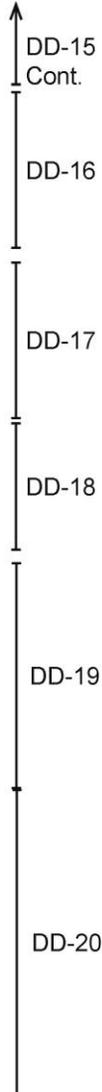
zones, estuarine habitats, vernal pools, stock ponds and reservoirs. Additional high bird density areas include coastal sage-scrub or other chaparral that provide nesting areas. Migratory corridors, swales, rocky outcrops, or other features that concentrate raptor prey or bats should also be considered areas to avoid placement of wind turbine facilities.

It is unclear in the DEIR how changes in the large wind turbine setback standards based on noise levels will affect wildlife resources. We are concerned the noise level standard may lessen the minimum setback previously based on tower height in situations where noise levels would not affect humans and therefore the 1.1 times tower height standard would be considered acceptable. As stated above, turbine location is a significant factor in reducing impacts to natural resources. We encourage the County to maintain large turbine setback standards subject to CEQA review.

### Recommendations to the Ordinance and Permit Review Process

The Department presented comments in letters dated March 26, 2010 and October 13, 2010 regarding previous Ordinance Amendments through the notice of preparation process (NOP) for this Project. The Department is concerned the County may not have addressed some of our previous comments. The Department reiterates the following comments included in its previous NOP comment letters, and provides additional comments given the additional information provided in the DEIR:

1. The Department is concerned that our prior recommendations for pre-project baseline biological studies and standard terms for setbacks from high density or critical nesting areas have not been addressed or incorporated into the Ordinance and Ministerial and Administrative review processes. As outlined below the Department recommends the County include amongst the Ordinance standards thresholds that address potential impacts to biological resources including avian and bat mortality.
2. The Department recommends the amendments to Section 6951 of the Ordinance prohibit tower placement in high-density bird or bat areas or near wetland, riparian or breeding habitat resources which may support fully protected or CESA-listed species. The Department recommends the Ordinance identify appropriate setbacks (or buffer zones) between these areas and nest and roost sites of CESA- and/or federal Endangered Species Act (ESA)-listed species and SSC-designated bird and bat species, along with considering the potential for noise-related impacts to affected species. The Department also recommends Ordinance site-selection criteria also promote avoidance of nesting migratory birds and burrowing owls and reduce ground disturbance impacts to other sensitive species and to natural communities as well.
3. The Department recommends a pre-project, site-specific, baseline assessment and evaluation of potential impacts to biological resources should be included in the Ministerial and/or Administrative permit review process. At a minimum, an avian and bat risk assessment study prepared by a qualified biologist approved by the County should determine whether the proposed site would be located near high bird or bat use areas, including riparian, wetlands, and roost and nest sites as noted above. The study should identify if any fully protected, CESA-listed or federally listed, or SSC are present in the project area. The baseline assessment would determine if setbacks would be necessary to protect avian and bat species. The assessment and evaluation studies should follow guidelines in *California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development* (Department of Fish and Game and California Energy Commission 2007). A similar approach to permitting small wind turbines has been developed by the County of Marin (Ordinance NO. 3548 Marin County Code Title 22, 2010).



# Draft Responses to Comments

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Mr. Matthew Schneider  
December 29, 2011  
Page 5 of 7

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| 4. The Department recommends the County amend the Ordinance and analyze in the DEIR clearly defined thresholds of impacts to biological resources for the Ministerial and Administrative Permit processes that would initiate implementation of standard setbacks.  | DD-21 |
| 5. The Department recommends, the Ordinance describe options for less environmentally damaging alternatives in regards to the type of wind turbine (e.g., selection of vertical axis turbines, then horizontal axis turbines) or whether a preference for the building-mounted systems versus free-standing towers was considered.  | DD-22 |
| 6. The Department recommends the County consider developing an operations evaluation and monitoring study plan to assess whether avoidance and minimization standards implemented for small wind turbine projects are adequate to protect birds and bats from collision with turbines.  | DD-23 |
| 7. The Department recommends that in addition to noise levels and tower height the Ordinance take into account additional setbacks for large turbine projects that provide protection to special-status species and proper buffers from conserved NCCP lands and other areas designated for conservation. The large wind turbine setbacks should be fully evaluated under CEQA guidelines.  | DD-24 |
| <b>Consistency with Existing and Draft Conservation Plans:</b> The Department is concerned that wind energy facilities could conflict with one or more local ordinance protecting biological resources or may conflict with the provisions of an adopted NCCP. Specifically, we are concerned with the following aspects of the proposed Project and how they may affect implementation and coverage of species under the adopted South County MSCP, and affect the ability to cover species in the future North County and Draft East County MSCPs:  | DD-25 |
| 1. The DEIR is not clear as to whether the County is anticipating considering these facilities as "essential public facilities" under the MSCP and Biological Mitigation Ordinance (BMO). We believe that most of these facilities would not qualify as such because they are serving individual residences rather than constituting a regional facility that serves multiple users. Therefore, the Department recommends the County find facilities that generate energy for on-site uses for one legal lot are not considered an essential public facility under the MSCP and would not be exempted from the BMO. | DD-26 |
| 2. The Department recommends major facilities that require a MUP include an avian and bat protection plan (or equivalent) as part of future environmental review and permitting.  | DD-27 |
| 3. The County should track the location and the habitat gain/losses associated with each of these facilities and include this information in the County's MSCP annual report. A certificate of inclusion (or equivalent) demonstrating compliance with the MSCP and BMO should be required for all Ministerial facilities (those not requiring a MUP or other discretionary action) if the intent is to convey third party beneficiary status to those facilities through this proposed ordinance revision.   | DD-28 |
| 4. The County does not have "take" authority for CESA-listed species in the North and East areas of the County. Currently, take has only been authorized for the County's South County MSCP and it only applies to the covered species list; it does not apply to migratory birds or fully protected species (e.g., golden eagle, white-tailed kite, and red-tailed hawk). If a facility would impact CESA-listed species where take authorization has not been provided, a CESA Incidental Take Permit would be warranted. For potential   | DD-29 |

# Draft Responses to Comments

Mr. Matthew Schneider  
December 29, 2011  
Page 6 of 7

impacts to migratory birds and golden eagle, we recommend that the County consult the Department and with the United States Fish and Wildlife Service on the need for permits and to discuss measures to avoid take of fully protected species.

5. The Department recommends facilities located within or adjacent to the County pre-approved mitigation area (PAMA) or conserved lands comply with the land use adjacency guidelines to minimize impacts to the preserve and covered species. For facilities requiring a MUP or other discretionary action, these requirements should be built into the facilities development and/or included as permit conditions. For proposed Ministerial facilities, compliance should be documented through issuance of a certificate of inclusion (see also comment 3 above).
6. The Department recommends facilities under this Ordinance not be located within conserved lands that have been purchased using federal or State funds, conserved under the MSCP or conserved for some other biological purposes. The Department also recommends the County not deem the permitting of any proposed facilities that fall within these types of lands as Ministerial and instead require a discretionary permit subject to CEQA.
7. The Department recommends the County require the zoning verification provides an estimate on the total acreage of sensitive habitat proposed to be impacted under the Ministerial category within and outside the PAMA through the ordinance revisions and provide appropriate mitigation. Facilities with relatively small impacts should not be exempted from mitigating on an individual basis when the cumulative impact over the duration of the ordinance may be significant. If necessary, a worst case scenario should be used based on past County data for such facilities.

We appreciate the opportunity to comment on the DEIR for the amendments to the County's Wind Energy Zoning Ordinance. We also look forward to meeting with you in the near future to discuss our concerns and to assist the County in minimizing project impacts to biological resources. In addition we offer guidance to help develop a small turbine operations monitoring study plan. If you have any questions or comments regarding this letter, please contact Steve Cannata, Staff Environmental Scientist of the Department at (858) 467-4236 or email to [scannata@dfg.gov](mailto:scannata@dfg.gov).

Sincerely,



Edmund Pert  
Regional Manager  
South Coast Region

cc: State Clearinghouse, Sacramento  
ec: Bill Condon, DFG, Sacramento  
Stephen M. Juarez, DFG, San Diego  
Randy Rodriguez, DFG, San Diego  
Paul Schlitt, DFG, San Diego  
Erinn Wilson, DFG, San Diego  
Susan Wynn, US Fish and Wildlife Service, Carlsbad, CA  
Doreen Milligan, Fish and Wildlife Service, Carlsbad, CA

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## Draft Responses to Comments

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Mr. Matthew Schneider  
December 29, 2011  
Page 7 of 7

### Literature Cited

California Energy Commission and Department of Fish and Game (2007) California Guidelines for Reducing Impacts to Birds and Bats from Wind Energy Development.

Commission Final Report. California Energy Commission, Renewables Committee, and Energy Siting Division, and California Department of Fish and Game, Resources Management and Policy Division. CEC-700-2007-008-CMF.

Kerlinger, P., R. Curry, L. Culp, and A. Hasch (2008) Pre-construction meteorological tower fatality study Shiloh II wind power project, Solana County, California. Prepared by Curry and Kerlinger, LLC for Enxco.

Kuvlesky Jr. WP, Brennan LA, Morrison ML, Boydston KK, Ballard BM, et al. (2007) Wind Energy Development and Wildlife Conservation: Challenges and Opportunities. Journal of Wildlife Management: Vol. 71, No. 8 pp. 2487–2498

Marin County Code Title 22. (2010) Ordinance No. 3548 of the Marin County Board of supervisors.

Smallwood K. S. and C. G. Thelander (2004) Developing methods to reduce bird mortality in the Altamont Pass Wind Resource Area. Final Report by BioResource Consultants to the California Energy Commission, Public Interest Energy Research-Environmental Area, Contract No. 500-01-019:L. Spiegel, Program Manager. 363 pp. + appendices.

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**Response to Comment Letter DD**

**California Department of Fish and Game  
Edmund Pert  
December 29, 2011**

- DD-1** It should be noted that the County does not extend public review periods beyond the deadlines stated on the Notice of Availability. However, County staff agreed to accept late comments from the California Department of Fish and Game (CDFG), respond to them fully, and include them in the Final EIR.
- DD-2** The County agrees with this comment.
- DD-3** The County does not agree with this comment as stated. Small wind turbines that do not meet the zoning verification criteria for a ministerial permit would not be permitted at all except in those specific instances where an Administrative Permit can be obtained as stated in provisions 6951.a.12 and 6951.c. An Administrative Permit is a discretionary permit; however, not all discretionary permits are subject to CEQA or require avoidance/mitigation pursuant to CEQA. Such applications may be statutorily or categorically exempt from CEQA. The County agrees that any identified "take" of a state listed species would need permitting under the California Endangered Species Act (CESA), thus requiring avoidance or minimization through approvals with CDFG.
- DD-4** The County agrees with this comment.
- DD-5** The County agrees with this comment and would add that Sections 6861 and 6862 of the Zoning Ordinance are also proposed to be amended.
- DD-6** The County appreciates and acknowledges this comment. Responses regarding the specific remaining CDFG concerns are provided below.
- DD-7** The County agrees with these statements of fact.
- DD-8** The County does not agree with this comment. The DEIR provides a thorough evaluation of existing conditions and potential impacts to biological resources in Section 2.4.
- DD-9** The County wishes to provide all feasible minimization and avoidance measures in the provisions for small wind turbines and MET facilities. The draft Wind Energy Ordinance that was circulated for public review included design criteria that prohibit guy wires or trellis style towers, require avoidance of ridgelines, require undergrounding of power lines, and require turbines to be certified by the California

## Draft Responses to Comments

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Energy Commission (CEC). In addition, the County has added the following recommended criteria to the draft small wind turbine provisions in Section 6951.a in response to public comment:

1.iv.a: No part of the wind turbine shall be closer than 300 feet or 5 times the turbine height, whichever is greater, from the following: Power transmission towers and lines

1.iv.a: No part of the wind turbine shall be closer than 300 feet or 5 times the turbine height, whichever is greater, from the following: Blue line watercourse(s) as identified on the United States Geological Survey Topographic Map

1.iv.c No part of the wind turbine shall be closer than 300 feet or 5 times the turbine height, whichever is greater, from the following: Significant roost sites for sensitive bat species as mapped on the California Natural Diversity Database

1.v No part of a wind turbine shall be closer than 4,000 feet from a known golden eagle site.

2. Area of Disturbance. A small wind turbine shall not result in an area of ground disturbance (including grading, clearing, brushing, or grubbing) that is larger than a 25 foot radius around the base of a tower, and an access path to the tower that is a maximum of four feet wide. The entire area of disturbance shall be clearly defined on the plans submitted for Zoning Verification Permit review.

12. Pre-Approved Mitigation Area. No more than one small turbine is allowed on a legal lot designated as Pre-Approved Mitigation Area within the Multiple Species Conservation Program Subarea Plan. An Administrative Permit may be approved for more than one turbine if all the requirements of subsection "a" of this section are met and the cumulative rated capacity does not exceed 50 kilowatts.

Additional avoidance and minimization standards recommended in this letter were found not to be feasible as noted in the responses below.

**DD-10** The County does not agree with this comment. Large wind turbine setbacks from the property line will be primarily determined through the provisions for low frequency noise as proposed in the draft ordinance and noted in this comment. Setbacks from property lines are not necessarily correlated with potential impacts to biological resources (i.e., biological resources are not bound by property lines). Appropriate siting considerations, biological buffers, environmentally sensitive project design, and recommended mitigation will all be established during the discretionary review process for large wind turbine projects in accordance with the latest guidance from

## Draft Responses to Comments

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the wildlife agencies (see also mitigation measures M-BIO-1 and M-BIO-2 in DEIR Section 2.4.6.1). Pre-established property line setbacks developed for the purpose of reducing biological impacts would not be appropriate since any given distance would not necessarily be related to the resources on or near a particular project site. In consultation with the wildlife agencies on various projects, agency staff has often requested that rigid property line setbacks not be applied since they make it more difficult to relocate planned facilities a maximum distance away from sensitive resources without encroaching into required property-line setbacks.

**DD-11** The County agrees with this comment.

**DD-12** This comment appears to be stating that the specifications for turbines with rated capacity of up to 50kW can have large rotor blade diameters; and larger blade diameters result in increased bird mortality based on the studies cited.

County staff would like to clarify that the zoning verification process which would result in the ministerial permitting of small turbines applies to no more than 50kW on a given property. Thus, the potential for three free-standing or five roof-mounted turbines on a legal lot cannot cumulatively exceed 50kW. Given the height restriction of 80 feet applied to small turbines, it is extremely unlikely that a single small turbine would have a rotor blade diameter of 60 feet. The foreseeable County of San Diego applicant who would utilize new zoning provisions to achieve as much as 50kW would do so using multiple small towers with small rotor blade diameters.

In addition, the proposed ordinance will require that all small wind turbines be certified by the California Energy Commission (CEC). Currently, there are only five models that are certified by the CEC, four of which meet the County's proposed zoning verification process. The specifications of these certified models are provided in Attachment B to these responses to comments. While one model, the Gaia turbine, has a wide rotor blade diameter, it is also more costly compared to the smaller models.

While it is possible that a single poorly placed turbine could result in a significant number of bird and bat strikes, this statement is still speculative in nature. The literature cited by the commenter is composed of studies of large wind farms. Kerlinger et al. 2008 is a study of impacts from 50-60 meter high MET towers with guy wires. It concludes that no protected species were impacted but that numerous small to medium birds were affected. Kuvlesky et al. 2007 analyzes wind farm development and the effects of associated infrastructure. Smallwood and Thelander 2004 analyzes the effects of the industrial scale turbines at the Altamont Pass Wind Resource Area. This last reference does establish the correlation between larger

## Draft Responses to Comments

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blade rotor diameters and increased bird mortality. However, the study had to factor in many variables that pertain to large wind farms

There is no substantial evidence that a few small residential-scale turbines in an otherwise developed setting would result in a significant number of bird or bat strikes. Nonetheless, the County considers the potential for even a relatively small impact on special status species to be significant and disclosed that potential in the DEIR.

**DD-13** The County agrees with this comment, which is not inconsistent with the existing content of the DEIR.

**DD-14** The County has found additional feasible criteria that may reduce impacts from small wind turbines (see response to comment DD9 above). However, potential impacts to biological resources from both small and large turbines would still be significant and unavoidable based on the County's Guidelines for Determining Significance. Measures that would reduce impacts to a level below significant would not meet the project objectives. In fact, even the No Project Alternative would have significant and unavoidable impacts to biological resources. Only a proposal that would disallow wind turbines or implement a regional conservation program for biological resources would reduce potential biological impacts from wind energy to a level below significant.

**DD-15** The County agrees that selective siting of small turbines would potentially reduce impacts to biological resources, though not necessarily to a level below significant. The selective siting of small turbines away from certain habitats, species, or particular habitat features would require discretionary review of small wind turbines, which would conflict with project objectives (see responses to comment I6, L8, and L12). However, the County can include certain location criteria that use objective measurements from fixed locations. As such, the County has added the following restrictions to the draft ordinance in response to comments

1.iv.a: No part of the wind turbine shall be closer than 300 feet or 5 times the turbine height, whichever is greater from the following: Power transmission towers and lines

1.iv.a: No part of the wind turbine shall be closer than 300 feet or 5 times the turbine height, whichever is greater from the following: Blue line watercourse(s) as identified on the United States Geological Survey Topographic Map

1.iv.c No part of the wind turbine shall be closer than 300 feet or 5 times the turbine height, whichever is greater from the following: Significant roost sites for sensitive bat species as mapped on the California Natural Diversity Database

## **Draft Responses to Comments**

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1.v No part of a wind turbine shall be closer than 4,000 feet from a known golden eagle site.

These changes may further reduce potential impacts to biological resources; though not to a level below significant since sensitive habitat and special status species can still be adversely affected by small wind turbines at any given location in the unincorporated county.

**DD-16** The draft noise limitations in the proposed ordinance are expected to establish setbacks for large wind turbines at more than the proposed minimum of 1.1 times the turbine height. Appendix A to these responses provides examples of noise setbacks for certain types of large turbines. Applicants for large wind turbines may be able to get some of the noise restrictions waived. Therefore, setbacks may be reduced at certain property lines.

While the County agrees that turbine location is a significant factor in reducing impacts to biological resources, the County does not agree that the property line setbacks are a factor. Property lines do not influence where significant biological resources occur. All large wind turbine projects will be required to follow the latest guidelines for avoiding and minimizing impacts to sensitive species and habitats, which will be a major factor in siting turbines. Site-specific analyses will be more relevant to addressing impacts than standard property line setbacks. See also response to comment DD10 above.

**DD-17** This comment introduces the CDFG recommendations and does not raise a significant environmental issue for which a response is required.

**DD-18** This comment recommends conducting biological studies and establishing setbacks from biological resources, such as nesting areas, as part of the ministerial process for small turbines. To address these issues while still maintaining a ministerial permitting process, the County has included various setbacks for small wind turbines that can be measured from fixed known locations. These standards are described in responses to comments I6, I8, L2, L11, DD9, and DD15.

The comment further recommends placing biological thresholds within the proposed ordinance. The County does not agree with this recommendation. Bird and bat mortality cannot be monitored and altered under a ministerial permitting process. A ministerial decision involves only the use of fixed standards or objective measurements. And once the ministerial permit is issued, there are no on-going or follow-up actions between the County and the developer.

## Draft Responses to Comments

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**DD-19** This comment recommends specific siting criteria for small turbines and/or inclusion of setbacks from certain natural resources. By definition, these recommendations would result in discretionary review of small turbines (see responses to comments I6, I8, and L102). However, the County has included various setbacks from fixed known locations as described in response to comment DD15. Noise impacts from small wind turbines would not be significant (see response to comment L73).

**DD-20** This comment recommends conducting biological impact studies as part of the ministerial process for small turbines. By definition, such measures would result in a discretionary review of small turbines. See responses to comments I6, I7, I8, DD15, DD18, and DD9.

In addition, the County has reviewed the County of Marin Development Code for Wind Energy Conversion Systems, including Section 22.32.180(D), Site and Design Requirements, which establishes setbacks from biological resources. Please refer to response to comment I9.

**DD-21** This comment is not fully understood as written. However, as noted above in response to comment DD18, the use of thresholds for analysis and site-specific setback requirements would result in discretionary environmental review. The County's project objectives for the Wind Energy Ordinance are to allow development of small wind turbines without a discretionary permit (objective 6) and to streamline and clarify the approval process for the development and operation of small wind turbines (objective 4). Therefore, site-specific biological analysis for small wind turbines would conflict with the stated project objectives.

**DD-22** For small wind turbines, only one model that is certified by the CEC has a vertical axis (see Appendix B to these responses to comments). It is the least costly turbine but also the least productive. Many applicants would not be able to accommodate vertical axis models or roof-mounted wind turbines. A primary purpose of the project is to facilitate expanded use of wind turbines that provide measurable renewable energy. To restrict usage to only a couple of options would conflict with the objectives of the project.

**DD-23** This recommendation is not logistically or legally feasible. See responses to comments J20, L30, and L119.

**DD-24** As noted at the end of this comment, large wind turbine setbacks should be fully evaluated under CEQA. Through the Major Use Permit process, large wind turbines will be evaluated for minimum setback requirements, noise provision setback requirements, and additional minimization techniques such as buffers. To establish any kind of biological buffer or setback standards in the proposed ordinance would

## Draft Responses to Comments

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create several problems. First, pre-determined distances or formulas would be considered arbitrary and capricious at this time. No such standards have yet been established through studies or regulations. Second, based on staff's experience with ordinance requirements, these recommended standards would become the minimum and the maximum applied measures regardless of site-specific studies that may be conducted for large wind turbine projects. And finally, there's no substantial evidence at this time that inclusion of additional setbacks in the ordinance would reduce potential impacts to special status species. Therefore, measures such as biological setbacks or buffers should be determined through site-specific discretionary project review.

**DD-25** The County does not agree with this comment, as explained in more detail in responses to comments DD26 through DD32 below.

**DD-26** It appears the commenter is referring to the small wind turbines in this comment; however, the County will address the different sizes and permit types with regard to the Biological Mitigation Ordinance (BMO).

Under the proposed zoning verification process, small wind turbines may be permitted ministerially. Ministerial permits are not subject to the BMO. The language specifying that the BMO applies to discretionary permits is provided several times in the beginning of the ordinance (County of San Diego Code of Regulatory Ordinances Sections 86.501 - 86.502). Moreover, ministerial permits are exempt from CEQA. As such, they can also be found exempt from the BMO pursuant to the first BMO Exemption in Section 86.503(a). The Implementing Agreement for the MSCP acknowledges this in Section 17.1.A(2) and provides third party take authorizations for such permits.

The County has also added a provision that only one small wind turbine can be permitted ministerially within the MSCP pre-approved mitigation area (PAMA). If more than one small wind turbine is proposed in the PAMA, then they can be permitted with a discretionary Administrative Permit. These permits will be reviewed for BMO compliance. The public facility exemption (Exemption #8) would not apply.

Large wind turbine projects would not likely occur within the MSCP. Figure 1-4 within the DEIR shows the project area for large turbines based on wind resource potential. The only overlap between wind resource areas and the MSCP Plan boundaries occurs in Otay where the wind resource potential is marginal and the land is designated as MSCP Preserve Land. Therefore, it is not foreseeable that a large wind turbine Major Use Permit application would be processed in the MSCP.

## Draft Responses to Comments

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**DD-27** The County agrees with this comment and will require avian and bat protection plans or the latest equivalent as recommended by the wildlife agencies for large wind turbine projects.

**DD-28** The County agrees with this comment and can issue a certificate of inclusion (COI) for small ministerial wind turbines that are permitted within the MSCP boundaries but not within a Major or Minor Amendment Area or Preserve Area. County staff will include this in the zoning verification process for small wind turbines. It should be noted that this is a not a mitigation measure or an issue requiring revisions to the DEIR.

**DD-29** The County agrees with this comment which outlines regulatory requirements for "take" of State protected species. This comment applies to any permits that are issued by the County.

**DD-30** To address issues with MSCP PAMA, the County has added the following provision in Section 6951.a of the draft ordinance (see also response to comment I11):

12. Pre-Approved Mitigation Area. No more than one small turbine is allowed on a legal lot designated as Pre-Approved Mitigation Area within the Multiple Species Conservation Program Subarea Plan. An Administrative Permit may be approved for more than one turbine if all the requirements of subsection " a" of this section are met and the cumulative rated capacity does not exceed 50 kilowatts.

The County does not agree that sites adjacent to PAMA need to have special consideration. Currently, no ministerial permits issued by the County are reviewed for their proximity to PAMA.

Major Use Permits for large wind turbines are not expected to be proposed within the County's MSCP (see response to comment DD26). The County agrees that a COI can be issued for ministerial facilities (see response to comment DD28).

**DD-31** The County agrees with this comment. Permits for development, including ministerial permits, are not issued for properties or portions of properties designated as Preserve or otherwise conserved as open space. In order for a development permit to be processed on such lands, other discretionary actions (e.g., open space vacation, rezone, MSCP Amendment) must be processed first or concurrently with environmental review.

**DD-32** The County does not agree with this comment. For the project as a whole, it is too speculative to estimate what kinds of sensitive habitat impacts may occur and where. Sensitive habitat impacts within the MSCP can and will be tracked through the COI

## Draft Responses to Comments

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process using Habitrak; and these totals will be included in the MSCP annual report. However, these should not be separated or treated differently than other ministerial permits issued by the County. Small wind turbines are accessories to existing development with negligible development footprint. Project level and cumulative impacts, while potentially significant, would not be out of proportion with the impacts estimated for the County's Subarea Plan. It should also be noted that the County is in rough step with anticipated MSCP losses and gains.

**DD-33** The County appreciates this comment and will continue to coordinate with the CDFG.

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